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DICTIONARY FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

L1 545 CC.{2}P.C.{3,7}C/SQSP
L2 2 GCCSLPPCALNNPDYC/SQSP

FILE 'CA' ENTERED AT 07:44:57 ON 09 MAR 2003 COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

L3 208 L1
L4 89 L1 AND CONOTOXIN
L5 4 L2

L4 ANSWER 1 OF 89 CA COPYRIGHT 2003 ACS
TI Identification of the nicotinic receptor subtypes expressed on dopaminergic terminals in the rat striatum PY 2002

L4 ANSWER 2 OF 89 CA COPYRIGHT 2003 ACS
TI Declines in different .beta.2* nicotinic receptor populations in monkey striatum after nigrostriatal damage PY 2002

L4 ANSWER 3 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** IC from Conus geographus, a Novel Peptide Antagonist of Nicotinic Acetylcholine Receptors PY 2002

L4 ANSWER 4 OF 89 CA COPYRIGHT 2003 ACS
TI The synthesis and structure of an n-terminal dodecanoic acid conjugate of .alpha.- ***conotoxin*** MII PY 2002

L4 ANSWER 5 OF 89 CA COPYRIGHT 2003 ACS
TI Characterization of [125I]epibatidine binding and nicotinic agonist-mediated 86Rb+ efflux in interpeduncular nucleus and inferior colliculus of .beta.2 null mutant mice PY 2002

L4 ANSWER 6 OF 89 CA COPYRIGHT 2003 ACS
TI Toxins 'R' Us: more pharmacological tools from nature's superstore PY 2002

L4 ANSWER 7 OF 89 CA COPYRIGHT 2003 ACS
TI Alpha ***conotoxin*** peptides with analgesic properties PY 2002

L4 ANSWER 8 OF 89 CA COPYRIGHT 2003 ACS
TI Differential nicotinic receptor expression in monkey basal ganglia: Effects of nigrostriatal damage PY 2002

L4 ANSWER 9 OF 89 CA COPYRIGHT 2003 ACS
TI Methyllycaconitine is a potent antagonist of .alpha.- ***conotoxin*** -MII-sensitive presynaptic nicotinic acetylcholine receptors in rat striatum PY 2002

L4 ANSWER 10 OF 89 CA COPYRIGHT 2003 ACS
TI Novel conotoxins for use in the therapeutic regulation of ion channel function PY 2002

L4 ANSWER 11 OF 89 CA COPYRIGHT 2003 ACS
TI A novel choline-sensitive nicotinic receptor subtype that mediates enhanced GABA release in the chick ventral lateral geniculate nucleus PY 2002

L4 ANSWER 12 OF 89 CA COPYRIGHT 2003 ACS
TI 5-Iodo-A-85380 binds to .alpha.- ***conotoxin*** MII-sensitive nicotinic acetylcholine receptors (nAChRs) as well as .alpha.4.beta.2* subtypes PY 2002

L4 ANSWER 13 OF 89 CA COPYRIGHT 2003 ACS
TI Involvement of the .alpha.3 subunit in central nicotinic binding populations PY 2002

L4 ANSWER 14 OF 89 CA COPYRIGHT 2003 ACS
TI Solution conformation of .alpha.- ***Conotoxin*** EI, a neuromuscular toxin specific for the .alpha.1/.delta. subunit interface of Torpedo nicotinic acetylcholine receptor PY 2001

L4 ANSWER 15 OF 89 CA COPYRIGHT 2003 ACS
TI Protein sequences of synthetic Conus .alpha.-conotoxins and the therapeutic uses thereof as neuromuscular blocking agent PY 2002

L4 ANSWER 16 OF 89 CA COPYRIGHT 2003 ACS
TI New members of the .mu.- ***conotoxin*** family for use in the treatment of disease associated with sodium channel function and cDNAs encoding them PY 2002 2002

L4 ANSWER 17 OF 89 CA COPYRIGHT 2003 ACS
TI Loss of nicotinic receptors in monkey striatum after 1-methyl-4-phenyl- 1,2,3,6-tetrahydropyridine treatment is due to a decline in .alpha.- ***conotoxin*** MII sites PY 2002

L4 ANSWER 18 OF 89 CA COPYRIGHT 2003 ACS
TI Two new classes of conopeptides inhibit the .alpha.1-adrenoceptor and noradrenaline transporter PY 2001

L4 ANSWER 19 OF 89 CA COPYRIGHT 2003 ACS
TI Vulnerability of 125I-.alpha.- ***conotoxin*** MII binding sites to nigrostriatal damage in monkey PY 2001

L4 ANSWER 20 OF 89 CA COPYRIGHT 2003 ACS
TI Mechanisms for evolving hypervariability: the case of conopeptides PY 2001

L4 ANSWER 21 OF 89 CA COPYRIGHT 2003 ACS
TI An efficient synthetic scheme for natural .alpha.-conotoxins and their analogues PY 2001

L4 ANSWER 22 OF 89 CA COPYRIGHT 2003 ACS
TI An .alpha.4.beta.4 nicotinic receptor subtype is present in chick retina: identification, characterization and pharmacological comparison with the transfected .alpha.4.beta.4 and .alpha.6.beta.4 subtypes PY 2001

L4 ANSWER 23 OF 89 CA COPYRIGHT 2003 ACS
TI Structure-Activity Relationships in a Peptidic .alpha.7 Nicotinic Acetylcholine Receptor Antagonist PY 2000

L4 ANSWER 24 OF 89 CA COPYRIGHT 2003 ACS
TI Protein and cDNA sequences of Conus conotoxins and therapeutic uses thereof PY 1999

L4 ANSWER 25 OF 89 CA COPYRIGHT 2003 ACS
TI Alpha-conotoxins and nucleic acids encoding them PY 2000 2001 2002

L4 ANSWER 26 OF 89 CA COPYRIGHT 2003 ACS
TI Protein and cDNA sequences of Conus .alpha.-conotoxins and the therapeutic uses thereof as neuromuscular blocking agent PY 2000 2000 2000 2001 2001

L4 ANSWER 27 OF 89 CA COPYRIGHT 2003 ACS
TI 125I-.alpha.- ***conotoxin*** MII identifies a novel nicotinic acetylcholine receptor population in mouse brain PY 2000

L4 ANSWER 28 OF 89 CA COPYRIGHT 2003 ACS
TI .beta.3 Subunit is present in different nicotinic receptor subtypes in chick retina PY 2000

L4 ANSWER 29 OF 89 CA COPYRIGHT 2003 ACS
TI Conus peptides: novel probes for nicotinic acetylcholine receptor structure and function PY 2000

L4 ANSWER 30 OF 89 CA COPYRIGHT 2003 ACS
TI UB-165: A novel nicotinic agonist with subtype selectivity implicates the .alpha.4.beta.2* subtype in the modulation of dopamine release from rat striatal synaptosomes PY 2000

L4 ANSWER 31 OF 89 CA COPYRIGHT 2003 ACS
TI Leu10 of .alpha.- ***conotoxin*** PnIB confers potency for neuronal nicotinic responses in bovine chromaffin cells PY 2000

L4 ANSWER 32 OF 89 CA COPYRIGHT 2003 ACS
TI .rho.- ***Conotoxin*** peptides with .alpha.1-adrenoceptor antagonist activity, nucleic acids encoding them, antibodies, and therapeutic uses PY 2000 2000 2000 2001 2002

L4 ANSWER 33 OF 89 CA COPYRIGHT 2003 ACS
TI Pairwise interactions between neuronal .alpha.7 acetylcholine receptors and .alpha.- ***conotoxin*** PnIB PY 2000

L4 ANSWER 34 OF 89 CA COPYRIGHT 2003 ACS
TI Preparation of cyclized ***conotoxin*** peptides PY 2000 2000 2002 2001

L4 ANSWER 35 OF 89 CA COPYRIGHT 2003 ACS
TI Pharmacological characterization of the response of the leech pharynx to acetylcholine PY 1999

L4 ANSWER 36 OF 89 CA COPYRIGHT 2003 ACS
TI Single amino acid substitutions in .alpha.- ***conotoxin*** PnIA shift selectivity for subtypes of the mammalian neuronal nicotinic acetylcholine receptor PY 1999

L4 ANSWER 37 OF 89 CA COPYRIGHT 2003 ACS
TI Conopeptides from Conus striatus and Conus textile by cDNA cloning PY 1999

L4 ANSWER 38 OF 89 CA COPYRIGHT 2003 ACS
TI Single-Residue Alteration in .alpha.- ***Conotoxin*** PnIA Switches Its nAChR Subtype Selectivity PY 1999

L4 ANSWER 39 OF 89 CA COPYRIGHT 2003 ACS
TI Aromatic substitutions in .alpha.- ***conotoxin*** ImI. Synthesis of iodinated photoactivatable derivative PY 1999

L4 ANSWER 40 OF 89 CA COPYRIGHT 2003 ACS
TI Three-dimensional structure of .alpha.- ***conotoxin*** EI determined by 1H NMR spectroscopy PY 1999

L4 ANSWER 41 OF 89 CA COPYRIGHT 2003 ACS
TI Minimal conformation of the .alpha.- ***conotoxin*** ImI for the .alpha.7 neuronal nicotinic acetylcholine receptor recognition: correlated CD, NMR and binding studies PY 1999

L4 ANSWER 42 OF 89 CA COPYRIGHT 2003 ACS
TI Functional .alpha.6-containing nicotinic receptors are present in chick retina PY 1999

L4 ANSWER 43 OF 89 CA COPYRIGHT 2003 ACS
TI Pairwise interactions between neuronal .alpha.7 acetylcholine receptors and .alpha.- ***conotoxin*** ImI PY 1999

L4 ANSWER 44 OF 89 CA COPYRIGHT 2003 ACS
TI Cloning and sequencing of alpha- ***conotoxin*** sequences from Conus textile venom duct PY 1999

L4 ANSWER 45 OF 89 CA COPYRIGHT 2003 ACS
TI Solution structure of .alpha.- ***conotoxin*** ImI determined by two-dimensional NMR spectroscopy PY 1999

L4 ANSWER 46 OF 89 CA COPYRIGHT 2003 ACS
TI Solution Structure of .alpha.- ***Conotoxin*** ImI by 1H Nuclear Magnetic Resonance PY 1999

L4 ANSWER 47 OF 89 CA COPYRIGHT 2003 ACS
TI Inhibition of nicotine-induced hippocampal norepinephrine release in rats by alpha-conotoxins MII and AuIB microinjected into the locus ceruleus PY 1999

L4 ANSWER 48 OF 89 CA COPYRIGHT 2003 ACS
TI Uses of alpha- ***conotoxin*** peptides PY 1999 1999 2001 2002

L4 ANSWER 49 OF 89 CA COPYRIGHT 2003 ACS
TI Identification of tyrosine sulfation in Conus pennaceus conotoxins .alpha.-PnIA and .alpha.-PnIB: further investigation of labile sulfo- and phosphopeptides by electrospray, matrix-assisted laser desorption/ionization (MALDI) and atmospheric pressure MALDI mass spectrometry PY 1999

L4 ANSWER 50 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** ImI inhibits the .alpha.-bungarotoxin- resistant nicotinic response in bovine adrenal chromaffin cells PY 1999

L4 ANSWER 51 OF 89 CA COPYRIGHT 2003 ACS
TI NMR Solution Structure of .alpha.- ***Conotoxin*** ImI and Comparison to Other Conotoxins Specific for Neuronal Nicotinic Acetylcholine Receptors PY 1999

L4 ANSWER 52 OF 89 CA COPYRIGHT 2003 ACS
TI Preparation and interaction of .alpha.- ***conotoxin*** peptides with neuronal nicotinic acetylcholine receptors PY 1999 1999 1999 2000 2001

L4 ANSWER 53 OF 89 CA COPYRIGHT 2003 ACS
TI NMR spatial structure of .alpha.- ***conotoxin*** ImI reveals a common scaffold in snail and snake toxins recognizing neuronal nicotinic acetylcholine receptors PY 1999

L4 ANSWER 54 OF 89 CA COPYRIGHT 2003 ACS
TI Accelerated chemical synthesis of peptides and small proteins PY 1999

L4 ANSWER 55 OF 89 CA COPYRIGHT 2003 ACS
TI Unmasking the functions of the chromaffin cell .alpha.7 nicotinic receptor by using short pulses of acetylcholine and selective blockers PY 1998

L4 ANSWER 56 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** AuIB selectively blocks .alpha.3.beta.4 nicotinic acetylcholine receptors and nicotine-evoked norepinephrine release PY 1998

L4 ANSWER 57 OF 89 CA COPYRIGHT 2003 ACS
TI Three-Dimensional Solution Structure of .alpha.- ***Conotoxin*** MII by NMR Spectroscopy: Effects of Solution Environment on Helicity PY 1998

L4 ANSWER 58 OF 89 CA COPYRIGHT 2003 ACS
TI Functional determinants by which snake and cone snail toxins block the .alpha.7 neuronal nicotinic acetylcholine receptors PY 1998

L4 ANSWER 59 OF 89 CA COPYRIGHT 2003 ACS
TI Molecular dissection of subunit interfaces in the nicotinic acetylcholine receptor PY 1998

L4 ANSWER 60 OF 89 CA COPYRIGHT 2003 ACS
TI Toxic conopeptides AuIA, AuIB and AuIC of cone snail venom active against nicotinic receptors PY 1998 1999 1998

L4 ANSWER 61 OF 89 CA COPYRIGHT 2003 ACS
TI Two distinct nicotinic receptors, one pharmacologically similar to the vertebrate .alpha.7-containing receptor, mediate Cl currents in Aplysia neurons PY 1998

L4 ANSWER 62 OF 89 CA COPYRIGHT 2003 ACS
TI The 1.1 .ANG. Resolution Crystal Structure of [Tyr15]EpI, a Novel .alpha.- ***Conotoxin*** from Conus episcopatus, Solved by Direct Methods PY 1998

L4 ANSWER 63 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** EpI, a novel sulfated peptide from Conus episcopatus that selectively targets neuronal nicotinic acetylcholine receptors PY 1998

L4 ANSWER 64 OF 89 CA COPYRIGHT 2003 ACS
TI Identification of residues in the neuronal .alpha.7 acetylcholine receptor that confer selectivity for ***conotoxin*** ImI PY 1998

L4 ANSWER 65 OF 89 CA COPYRIGHT 2003 ACS
TI Use of .alpha.- ***conotoxin*** MII? to treat disorders resulting from nicotine-stimulated dopamine release PY 1998 1998 1998 1999 1999

L4 ANSWER 66 OF 89 CA COPYRIGHT 2003 ACS
TI Structural elements in .alpha.- ***conotoxin*** ImI essential for binding to neuronal .alpha.7 receptors PY 1998

L4 ANSWER 67 OF 89 CA COPYRIGHT 2003 ACS
TI Use of ***conotoxin*** peptides ImI and MII as cardiovascular agents PY 1998 1998 2001 1999 2001

L4 ANSWER 68 OF 89 CA COPYRIGHT 2003 ACS
TI Differential inhibition by .alpha.- ***conotoxin*** -MII of the nicotinic stimulation of [3H] dopamine release from rat striatal synaptosomes and slices PY 1998

L4 ANSWER 69 OF 89 CA COPYRIGHT 2003 ACS
TI Three-Dimensional Solution Structure of .alpha.- ***Conotoxin*** MII, an .alpha.3.beta.2 Neuronal Nicotinic Acetylcholine Receptor-Targeted Ligand PY 1997

L4 ANSWER 70 OF 89 CA COPYRIGHT 2003 ACS
TI Crystal Structure at 1.1 .ANG. Resolution of .alpha.- ***Conotoxin*** PnIB: Comparison with .alpha.-Conotoxins PnIA and GI PY 1997

L4 ANSWER 71 OF 89 CA COPYRIGHT 2003 ACS
TI Determinants of specificity for .alpha.- ***conotoxin*** MII on .alpha.3.beta.2 neuronal nicotinic receptors PY 1997

L4 ANSWER 72 OF 89 CA COPYRIGHT 2003 ACS
TI Differential block of nicotinic synapses on B versus C neurons in sympathetic ganglia of frog by .alpha.-conotoxins MII and ImI PY 1997

L4 ANSWER 73 OF 89 CA COPYRIGHT 2003 ACS
TI Identification of genes encoding A-lineage ***conotoxin*** peptides by PCR PY 1996 1995 1996

L4 ANSWER 74 OF 89 CA COPYRIGHT 2003 ACS
TI ***Conotoxin*** peptides PY 1997 1995 1996 1996 1996 1996 1998 1998 1999

L4 ANSWER 75 OF 89 CA COPYRIGHT 2003 ACS
TI Use of ***conotoxin*** peptides U002 and MII for treating or detecting small-cell lung carcinoma PY 1996 1997 1996 1998 1998 1999

L4 ANSWER 76 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** -ImI: a competitive antagonist at .alpha.-bungarotoxin-sensitive neuronal nicotinic receptors in hippocampal neurons PY 1996

L4 ANSWER 77 OF 89 CA COPYRIGHT 2003 ACS
TI ***Conotoxin*** peptides PY 1996 1995 1995 1995 1995 1995 1997 1996 2002 1998 2002 2002 1997 1996 1997 1997 1997 1998

L4 ANSWER 78 OF 89 CA COPYRIGHT 2003 ACS
TI The 1.1 .ANG. crystal structure of the neuronal acetylcholine receptor antagonist, .alpha.- ***conotoxin*** PnIA from Conus pennaceus PY 1996

L4 ANSWER 79 OF 89 CA COPYRIGHT 2003 ACS
TI A new .alpha.- ***conotoxin*** which targets .alpha.3.beta.2 nicotinic acetylcholine receptors PY 1996

L4 ANSWER 80 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** Imperialis I inhibits nicotine-evoked hormone release and cell proliferation in human neuroendocrine carcinoma cells PY 1996

L4 ANSWER 81 OF 89 CA COPYRIGHT 2003 ACS
TI ***Conotoxin*** peptides of Conus striatus PY 1995 1996 1995 1997 1996 2002 1998 2002

L4 ANSWER 82 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** EI, A New Nicotinic Acetylcholine Receptor Antagonist with Novel Selectivity PY 1995

L4 ANSWER 83 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.- ***Conotoxin*** Im I exhibits subtype-specific nicotinic acetylcholine receptor blockade: preferential inhibition of homomeric .alpha.7 and .alpha.9 receptors PY 1995

L4 ANSWER 84 OF 89 CA COPYRIGHT 2003 ACS
TI .alpha.-Conotoxins selectively inhibit one of the two acetylcholine binding sites of nicotinic receptors PY 1995

L4 ANSWER 85 OF 89 CA COPYRIGHT 2003 ACS
TI Conotoxins having acetylcholine receptor binding properties and their use in receptors assays and pharmaceuticals PY 1995 1995 1995 1995 1997 1996 1997 1997 1998

L4 ANSWER 86 OF 89 CA COPYRIGHT 2003 ACS
TI New Mollusk-Specific .alpha.-Conotoxins Block Aplysia Neuronal Acetylcholine Receptors PY 1994

L4 ANSWER 87 OF 89 CA COPYRIGHT 2003 ACS
TI A nicotinic acetylcholine receptor ligand of unique specificity, .alpha.- ***conotoxin*** Iml PY 1994

L4 ANSWER 88 OF 89 CA COPYRIGHT 2003 ACS
TI Novel .alpha.- and .omega.-conotoxins and Conus striatus venom PY 1992

L4 ANSWER 89 OF 89 CA COPYRIGHT 2003 ACS
TI ***Conotoxin*** -related compounds PY 1985

L4 ANSWER 6 OF 89 CA COPYRIGHT 2003 ACS AN 137:332622 CA
TI Toxins 'R' Us: more pharmacological tools from nature's superstore
AU Harvey, Alan L.
CS Strathclyde Institute for Drug Research, Dept of Physiology and Pharmacology, University of Strathclyde, Glasgow, G4 0NR, UK
SO Trends in Pharmacological Sciences (2002), 23(5), 201-203 CODEN: TPHSDY; ISSN: 0165-6147
PB Elsevier Science Ltd. DT Journal; General Review LA English
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 89 CA COPYRIGHT 2003 ACS AN 131:82983 CA
TI Uses of alpha- ***conotoxin*** peptides
IN Olivera, Baldomero M.; Mcintosh, J. Michael; Yoshikami, Doju; Cartier, G. Edward; Luo, Siqin
PA University of Utah Research Foundation, USA
SO PCT Int. Appl., 40 pp. CODEN: PIXXD2 DT Patent LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9933482	A1	19990708	WO 1998-US27367	19981223
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9920917	A1	19990719	AU 1999-20917	19981223
US 6265541	B1	20010724	US 1998-219446	19981223
US 2002022715	A1	20020221	US 2001-897465	20010703
PRAI US 1997-70153P	P	19971231		
US 1998-80588P	P	19980403		
US 1998-219446	A3	19981223		
WO 1998-US27367	W	19981223		

OS MARPAT 131:82983
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORDALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 89 CA COPYRIGHT 2003 ACS
AN 136:146437 CA
TI New members of the .mu.- ***conotoxin*** family for use in the treatment of disease associated with sodium channel function and cDNAs encoding them
IN Olivera, Baldomero M.; McIntosh, J. Michael; Garrett, James E.; Watkins, Maren; Cruz, Lourdes J.; Shon, Ki-Joon; Jacobsen, Richard; Jones, Robert M.; Cartier, G. Edward; Shen, Gregory S.
PA University of Utah Research Foundation, USA; Cognetix, Inc. SO PCT Int. Appl., 231 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002007678	A2	20020131	WO 2001-US23125	20010723
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001082945	A5	20020205	AU 2001-82945	20010723
PRAI US 2000-219619P	P	20000721		
US 2000-245157P	P	20001103		
US 2001-264319P	P	20010129		
US 2001-277270P	P	20010321		
WO 2001-US23125	W	20010723		

L4 ANSWER 25 OF 89 CA COPYRIGHT 2003 ACS AN 133:146232 CA
TI Alpha-conotoxins and nucleic acids encoding them
IN Watkins, Maren; Olivera, Baldomero M.; Hillyard, David R.; McIntosh, J. Michael; Jones, Robert M.
PA University of Utah Research Foundation, USA; Cognetix, Inc. SO PCT Int. Appl., 229 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000044776	A1	20000803	WO 2000-US1979	20000128
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1147130	A1	20011024	EP 2000-908382	20000128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002534996	T2	20021022	JP 2000-596032	20000128
PRAI US 1999-118381P	P	19990129		
WO 2000-US1979	W	20000128		

OS MARPAT 133:146232
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 89 CA COPYRIGHT 2003 ACS AN 133:131093 CA
TI Protein and cDNA sequences of Conus .alpha.-conotoxins and the therapeutic uses thereof as neuromuscular blocking agent
IN Olivera, Baldomero M.; Layer, Richard T.; Watkins, Maren; Hillyard, David R.; McIntosh, J. Michael; Jones, Robert M.
PA University of Utah Research Foundation, USA; Cognetix, Inc. SO PCT Int. Appl., 95 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2000043409 A2 20000727 WO 2000-US1372 20000121
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2361138 AA 20000727 CA 2000-2361138 20000121
AU 2000027327 A5 20000807 AU 2000-27327 20000121
US 6268473 B1 20010731 US 2000-488799 20000121
EP 1159288 A1 20011205 EP 2000-905680 20000121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI US 1999-116881P P 19990122
US 1999-116882P P 19990122
WO 2000-US1372 W 20000121
OS MARPAT 133:131093

L4 ANSWER 32 OF 89 CA COPYRIGHT 2003 ACS
AN 132:288791 CA
TI .rho.- ***Conotoxin*** peptides with .alpha.1-adrenoceptor antagonist activity, nucleic acids encoding them, antibodies, and therapeutic uses
IN Lewis, Richard James; Alewood, Paul Francis; Sharpe, Iain Andrew
PA The University of Queensland, Australia SO PCT Int. Appl., 47 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000020443 A1 20000413 WO 1999-AU843 19991001
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2344551 AA 20000413 CA 1999-2344551 19991001
AU 9963211 A1 20000426 AU 1999-63211 19991001
EP 1117681 A1 20010725 EP 1999-950405 19991001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2002526097 T2 20020820 JP 2000-574554 19991001
PRAI AU 1998-6273 A 19981002
AU 1998-9862 A 19981002
WO 1999-AU843 W 19991001
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 89 CA COPYRIGHT 2003 ACS AN 132:237373 CA
TI Preparation of cyclized ***conotoxin*** peptides
IN Craik, David James; Daly, Norelle Lee; Nielsen, Katherine Justine
PA University of Queensland, Australia SO PCT Int. Appl., 43 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000015654 A1 20000323 WO 1999-AU769 19990914
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9960705 A1 20000403 AU 1999-60705 19990914
AU 747006 B2 20020509
EP 1129106 A1 20010905 EP 1999-947111 19990914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRAI AU 1998-5895 A 19980914
WO 1999-AU769 W 19990914
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 89 CA COPYRIGHT 2003 ACS AN 130:297009 CA
TI Preparation and interaction of .alpha.- ***conotoxin*** peptides with neuronal nicotinic acetylcholine receptors
IN Shon, Ki-joon; Olivera, Baldomero M.; Rivier, Jean E.; Koerber, Steven C.; Shen, Gregory S.; McIntosh, J. Michael; Cartier, G. Edward; Yoshikami, Doju
PA University of Utah Research Foundation, USA; Case Western Reserve University; Salk Institute; Cognetix, Inc.
SO PCT Int. Appl., 176 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 9921878 A1 19990506 WO 1998-US22368 19981023
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2308115 AA 19990506 CA 1998-2308115 19981023
AU 9911143 A1 19990517 AU 1999-11143 19981023
EP 1032588 A1 20000906 EP 1998-953885 19981023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2001521042 T2 20011106 JP 2000-517986 19981023
PRAI US 1997-62783P P 19971024
US 1997-65814P P 19971114
WO 1998-US22368 W 19981023
OS MARPAT 130:297009
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 60 OF 89 CA COPYRIGHT 2003 ACS AN 130:21651 CA
TI Toxic conopeptides AulA, AulB and AulC of cone snail venom active against nicotinic receptors
IN McIntosh, J. Michael; Cartier, G. Edward; Yoshikami, Doju; Luo, Siqin; Olivera, Baldomero M.
PA University of Utah Research Foundation, USA SO PCT Int. Appl., 22 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9851322 A1 19981119 WO 1998-US7004 19980409
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
US 5866682 A 19990202 US 1997-857068 19970515
AU 9871043 A1 19981208 AU 1998-71043 19980409
PRAI US 1997-857068 19970515
WO 1998-US7004 19980409
OS MARPAT 130:21651
E.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 65 OF 89 CA COPYRIGHT 2003 ACS AN 129:37452 CA
TI Use of .alpha.- ***conotoxin*** MII? to treat disorders resulting from nicotine-stimulated dopamine release
IN McIntosh, J. Michael; Kulak, Jennifer M.; Yoshikami, Doju; Olivera, Baldomero M.
PA University of Utah Research Foundation, USA SO PCT Int. Appl., 30 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9824462 A1 19980611 WO 1997-US22350 19971205

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 5780433	A	19980714	US 1996-761674	19961206
AU 9856909	A1	19980629	AU 1998-56909	19971205
US 5922679	A	19990713	US 1998-45925	19980323
US 5929034	A	19990727	US 1998-45926	19980323
PRAI US 1996-761674		19961206		
WO 1997-US22350		19971205		

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 67 OF 89 CA COPYRIGHT 2003 ACSbbAN 129:12744 CA
TI Use of ***conotoxin*** peptides Iml and MII as cardiovascular agents
IN McIntosh, J. Michael; Olivera, Baldomero M.; Yoshikami, Doju
PA University of Utah Research Foundation, USA; McIntosh, J. Michael; Olivera, Baldomero M.; Yoshikami, Doju
SO PCT Int. Appl., 24 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9822126	A1	19980528	WO 1997-US20669	19971117

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9852555	A1	19980610	AU 1998-52555	19971117
AU 735724	B2	20010712		
EP 948346	A1	19991013	EP 1997-947488	19971117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001505878	T2	20010508	JP 1998-523732	19971117
PRAI US 1996-31141P	P	19961118		
WO 1997-US20669	W	19971117		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 73 OF 89 CA COPYRIGHT 2003 ACS AN 126:182612 CA
TI Identification of genes encoding A-lineage ***conotoxin*** peptides by PCR
IN Olivera, Baldomero M.; Cruz, Lourdes J.; Hillyard, David R.; Mcintosh, J. Michael; Santos, Ameurfino D.
PA University of Utah Research Foundation, USA SO U.S., 36 pp., Cont.-in-part of U.S. 5,514,774. CODEN: USXXAM
DT Patent LA English FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5589340	A	19961231	US 1995-477383	19950607
US 5432155	A	19950711	US 1993-84848	19930629
US 5514774	A	19960507	US 1993-137800	19931019
PRAI US 1993-84848	A2	19930629		
US 1993-137800	A2	19931019		

L4 ANSWER 74 OF 89 CA COPYRIGHT 2003 ACS AN 126:152786 CA
TI ***Conotoxin*** peptides
IN Olivera, Baldomero M.; Cruz, Lourdes J.; Hillyard, David R.; Mcintosh, J. Michael; Santos, Ameurfino D.
PA University of Utah Research Foundation, USA SO U.S., 35 pp., Cont.-in-part of U.S. 5,514,774. CODEN: USXXAM
DT Patent LA English FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5595972	A	19970121	US 1995-487174	19950607
US 5432155	A	19950711	US 1993-84848	19930629
US 5514774	A	19960507	US 1993-137800	19931019
CA 2223737	AA	19961219	CA 1996-2223737	19960604
WO 9640211	A1	19961219	WO 1996-US7962	19960604
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9662503	A1	19961230	AU 1996-62503	19960604
AU 695055	B2	19980806		
EP 844883	A1	19980603	EP 1996-921234	19960604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11506737	T2	19990615	JP 1996-500831	19960604
PRAI US 1993-84848	A2	19930629		
US 1993-137800	A2	19931019		
US 1995-487174	A	19950607		
WO 1996-US7962	W	19960604		

L4 ANSWER 75 OF 89 CA COPYRIGHT 2003 ACS AN 126:126900 CA
TI Use of ***conotoxin*** peptides U002 and MII for treating or detecting small-cell lung carcinoma
IN Olivera, Baldomera M.; Cruz, Lourdes J.; Hillyard, David R.; Mcintosh, J. Michael; Santos, Ameurfino S.
PA University of Utah Research Fondation, USA SO PCT Int. Appl., 28 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9640211	A1	19961219	WO 1996-US7962	19960604
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5595972	A	19970121	US 1995-487174	19950607
AU 9662503	A1	19961230	AU 1996-62503	19960604
AU 695055	B2	19980806		
EP 844883	A1	19980603	EP 1996-921234	19960604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11506737	T2	19990615	JP 1996-500831	19960604
PRAI US 1995-487174	A	19950607		
US 1993-84848	A2	19930629		
US 1993-137800	A2	19931019		
WO 1996-US7962	W	19960604		

L4 ANSWER 76 OF 89 CA COPYRIGHT 2003 ACS AN 125:239192 CA
TI .alpha.- ***Conotoxin*** -Iml: a competitive antagonist at .alpha.-bungarotoxin-sensitive neuronal nicotinic receptors in hippocampal neurons
AU Pereira, Edna F. R.; Alkondon, M.; McIntosh, J. Michael; Albuquerque, Edson X.
CS Dep. Pharmacol. Experimental Therapeutics, Univ. Maryland Sch. Med., Baltimore, MD, USA
SO Journal of Pharmacology and Experimental Therapeutics (1996), 278(3), 1472-1483 CODEN: JPETAB; ISSN: 0022-3565
PB Williams & Wilkins DT Journal LA English

L4 ANSWER 77 OF 89 CA COPYRIGHT 2003 ACS AN 125:28184 CA
TI ***Conotoxin*** peptides
IN Olivera, Baldomero M.; Cruz, Lourdes J.; Hillyard, David R.; Mcintosh, J. Michael; Santos, Ameurfina D.
PA University of Utah Research Foundation, USA SO U.S., 32 pp., Cont.-in-part of U.S. 5, 432, 155. CODEN: USXXAM
DT Patent LA English FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5514774	A	19960507	US 1993-137800	19931019
US 5432155	A	19950711	US 1993-84848	19930629
CA 2165566	AA	19950112	CA 1994-2165566	19940627
CA 2172989	AA	19950427	CA 1994-2172989	19941019
WO 9511256	A1	19950427	WO 1994-US11927	19941019
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9510831	A1	19950508	AU 1995-10831	19941019
AU 681216	B2	19970821		
EP 728146	A1	19960828	EP 1995-901691	19941019
EP 728146	B1	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10509415	T2	19980914	JP 1994-512187	19941019
AT 211764	E	20020115	AT 1995-901691	19941019

ES 2169754	T3	20020716	ES 1995-901691	19941019
US 5700778	A	19971223	US 1995-458499	19950602
US 5589340	A	19961231	US 1995-477383	19950607
US 5595972	A	19970121	US 1995-487174	19950607
US 5633347	A	19970527	US 1995-480750	19950607
AU 9735197	A1	19971120	AU 1997-35197	19970821
AU 699078	B2	19981119		
PRAI US 1993-84848	A2	19930629		
US 1993-137800	A	19931019		
WO 1994-US11927	W	19941019		

L4 ANSWER 78 OF 89 CA COPYRIGHT 2003 ACS AN 124:335314 CA
TI The 1.1 .ANG. crystal structure of the neuronal acetylcholine receptor antagonist, .alpha.- ***conotoxin*** PnIA from Conus pennaceus
AU Hu, Shu-Hong; Gehrmann, John; Guddat, Luke W.; Alewood, Paul F.; Craik, David J.; Martin, Jennifer L.
CS Center Drug Design and Development, Univ. Queensland, St. Lucia, 4072, Australia
SO Structure (London) (1996), 4(4), 417-423 CODEN: STRUE6; ISSN: 0969-2126 PB Current Biology
DT Journal LA English
AB The 1.1 .ANG. crystal structure of synthetic PnIA was detd. by direct methods using the Shake-and-Bake program. The three-dimensional structure incorporates a .beta. turn followed by two .alpha.-helical turns. The conformation is stabilized by two disulfide bridges that form the interior of the mol., with all other side chains oriented outwards. The compact architecture of the PnIA toxin provides a rigid framework for presentation of chem. groups that are required for activity. The structure is characterized by distinct hydrophobic and polar surfaces; a 16 .ANG. sepn. of the sole pos. and neg. charges (these two charged residues being located at opposite ends of the mol.); a hydrophobic region and a protruding tyrosine side chain. These features may be important for the specific interaction of PnIA with neuronal nAChR.

L4 ANSWER 81 OF 89 CA COPYRIGHT 2003 ACS AN 124:48165 CA
TI ***Conotoxin*** peptides of Conus striatus
IN Olivera, Baldomero M.; Cruz, Lourdes J.; Hillyard, David R.; McIntosh, J. Michael; Santos, Ameurfina D.
PA University of Utah Research Foundation, USA SO PCT Int. Appl., 66 pp. CODEN: PIXXD2
DT Patent LA English FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9511256	A1	19950427	WO 1994-US11927	19941019
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5514774	A	19960507	US 1993-137800	19931019
AU 9510831	A1	19950508	AU 1995-10831	19941019
AU 681216	B2	19970821		
EP 728146	A1	19960828	EP 1995-901691	19941019
EP 728146	B1	20020109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10509415	T2	19980914	JP 1994-512187	19941019
AT 211764	E	20020115	AT 1995-901691	19941019
PRAI US 1993-137800	A	19931019		
US 1993-84848	A2	19930629		
WO 1994-US11927	W	19941019		

L4 ANSWER 82 OF 89 CA COPYRIGHT 2003 ACS AN 123:330553 CA
TI .alpha.- ***Conotoxin*** EI, A New Nicotinic Acetylcholine Receptor Antagonist with Novel Selectivity
AU Martinez, Jennifer S.; Olivera, Baldomero M.; Gray, William R.; Craig, A. Grey; Groebe, Duncan R.; Abramson, Stewart N.; McIntosh, J. Michael
CS Department of Biology, University of Utah, Salt Lake City, UT, 84112, USA
SO Biochemistry (1995), 34(44), 14519-26 CODEN: BICHAW; ISSN: 0006-2960 PB American Chemical Society
DT Journal LA English
AB We report the isolation and characterization of a novel nicotinic acetylcholine receptor (nAChR) ligand. The toxin is an 18 amino acid peptide and is the first reported .alpha.- ***conotoxin*** from an Atlantic fish-hunting cone. The peptide was purified from the venom of Conus ermineus and is called .alpha.- ***conotoxin*** EI. The sequence diverges from that of previously isolated .alpha.-conotoxins. We demonstrate that this structural divergence has functional consequences. In Torpedo nAChRs, .alpha.- ***conotoxin*** EI selectively binds the agonist site near the .alpha./.delta. subunit interface in contrast to .alpha.- ***conotoxin*** MI which selectively targets the .alpha./.gamma. ligand binding site. In mammalian nAChRs .alpha.- ***conotoxin*** EI shows high affinity for both the .alpha./.delta. and .alpha./.gamma. subunit interfaces (with some preference for the .alpha./.delta. site), whereas .alpha.- ***conotoxin*** MI is highly selective for the .alpha./.delta. ligand binding site. The sequence of the peptide is: Arg-Asp-Hyp-Cys-Cys-Tyr-His-Pro-Thr-Cys-Asn-Met-Ser-Asn- Pro-Gln-Ile-Cys-NH2, with disulfide bridging between Cys4-Cys10 and Cys5-Cys18, analogous to those of previously described .alpha.-conotoxins. This sequence has been verified by total chem. synthesis. Thus, .alpha.- ***conotoxin*** EI is a newly-available tool with unique structure and function for characterization of nAChRs.

L4 ANSWER 85 OF 89 CA COPYRIGHT 2003 ACS AN 123:50449 CA
TI Conotoxins having acetylcholine receptor binding properties and their use in receptors assays and pharmaceuticals
IN Olivera, Baldomero M.; Rivier, Jean E. F.; Cruz, Lourdes J.; Abogadie, Fe; Hopkins, Chris E.; Dykert, John; Torres, Josep L.
PA Salk Institute for Biological Studies, USA; University of Utah Research Foundation
SO PCT Int. Appl., 55 pp. CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9501436	A1	19950112	WO 1994-US7194	19940627
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5432155	A	19950711	US 1993-84848	19930629
CA 2165566	AA	19950112	CA 1994-2165566	19940627
AU 9471158	A1	19950124	AU 1994-71158	19940627
AU 678837	B2	19970612		
EP 706566	A1	19960417	EP 1994-920316	19940627
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, NL, SE				
US 5700778	A	19971223	US 1995-458499	19950602
AU 9735197	A1	19971120	AU 1997-35197	19970821
AU 699078	B2	19981119		
PRAI US 1993-84848	A	19930629		
WO 1994-US7194	W	19940627		

OS MARPAT 123:50449
AB Substantially pure conotoxins are provided which inhibit synaptic transmissions at the neuromuscular junctions and which are useful both in vivo and in assays because they specifically target particular receptors, such as the acetylcholine receptor, and ion channels. The peptides are of such length that they can be made by chem. synthesis. The peptides may be used to analyze acetylcholine receptors and in pharmaceuticals (no data). Thirteen different conotoxins contg. 16-46 amino acids were prepd. by solid phase peptide synthesis and tested for biol. activity.

L4 ANSWER 86 OF 89 CA COPYRIGHT 2003 ACS AN 121:201190 CA
TI New Mollusk-Specific .alpha.-Conotoxins Block Aplysia Neuronal Acetylcholine Receptors
AU Fainzilber, Michael; Hasson, Arik; Oren, Ruth; Burlingame, Alma L.; Gordon, Dalia; Spira, Micha E.; Zlotkin, Eliahu
CS Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Jerusalem, 91904, Israel
SO Biochemistry (1994), 33(32), 9523-9 CODEN: BICHAW; ISSN: 0006-2960 DT Journal LA English
AB Two mollusk-specific neurotoxic peptides from the venom of the molluscivorous snail Conus pennaceus are described. These new toxins block acetylcholine receptors (AChR) of cultured Aplysia neurons. Bath application of 0.5-1 .mu.M toxin induces 5-10-mV membrane depolarization, which recovers to the control level within 1-3 min in the presence of the toxin. T response is blocked by 1 mM hexamethonium. Concomitantly with the transient depolarization, the toxins block approx. 90% the depolarizing responses evoked by brief iontophoretic application of acetylcholine. The pharmacol. and amino acid sequences of the toxins (.alpha.PnIA, GCCSLPPCAANNPDYC-NH2; .alpha.PnIB, GCCSLPPCALSNPDYC-NH2) enable their classification as novel .alpha.-conotoxins. The sequences differ from those of previously described.alpha.-conotoxins in a no. of features, the most striking of which is the presence of a single neg. charged residue in the C-terminal loop. This loop contains a pos. charged residue in piscivorous venom .alpha.-conotoxins. In contrast to other .alpha.-conotoxins, which are selective for vertebrate skeletal muscle nicotinic ACh receptors, these Conus pennaceus toxins block neuronal ACh receptors in molluscs. As such they are new probes which can be used to define subtypes of ACh receptors, and they should be useful tools in the study of structure-function relationships in ACh receptors.

L4 ANSWER 88 OF 89 CA COPYRIGHT 2003 ACS AN 117:206785 CA
TI Novel .alpha.- and .omega.-conotoxins and Conus striatus venom
AU Ramilo, Cecilia A.; Zafaralla, Glenn C.; Nadasdi, Laszlo; Hammerland, Lance G.; Yoshikami, Doju; Gray, William R.; Kristipati, Ramasharma; Ramachandran, J.; Miljanich, George; et al.
CS Mar. Sci. Inst., Univ. Philippines, Quezon City, 1101, Philippines
SO Biochemistry (1992), 31(41), 9919-26 CODEN: BICHAW; ISSN: 0006-2960

DT Journal
LA English
AB Three neurotoxic peptides from the venom of C. striatus were purified, biochem. characterized, and chem. synthesized. One of these, an acetylcholine receptor blocker designated .alpha.- ***conotoxin*** SII, has the sequence GCCCNPACGPNYGCGTSCS. In contrast to all other .alpha.-conotoxins, SII has 3 disulfide bonds (instead of two), has no net pos. charge, and has a free C-terminus. The other 2 paralytic peptides are Ca channel-targeted .omega.-conotoxins, SVIA and SVIB. .omega.-SVIA is the smallest natural .omega.- ***conotoxin*** so far characterized and has the sequence CRSSGSPCGVTSICCGRCYRGKCT-NH2. Although .omega.- ***conotoxin*** SVIA is a potent paralytic toxin in lower vertebrate species, it was much less effective in mammals. The third toxin, .omega.- ***conotoxin*** SVIB, has the sequence CKLKGQSCRKTSYDCCSGSCGRSGKC-NH2. This peptide has a different pharmacol. specificity from other .omega.-conotoxins previously purified from Conus venoms; only .omega.- ***conotoxin*** SVIB has proven to be lethal to mice upon ic injection. Binding competition expts. with rat brain synaptosomal membranes indicate that the high-affinity binding site for .omega.- ***conotoxin*** SVIB is distinct from the high-affinity .omega.- ***conotoxin*** GVIA or MVIIA site.

L4 ANSWER 89 OF 89 CA COPYRIGHT 2003 ACS AN 105:43332 CA
TI ***Conotoxin*** -related compounds
IN Sakakibara, Shunpei; Nishiuchi, Yuji
PA Ajinomoto Co., Inc., Japan SO Jpn. Kokai Tokkyo Koho, 16 pp. CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60226899	A2	19851112	JP 1984-83463	19840425
PRAI JP 1984-83463		19840425		

GI

/ Structure 1 in file .gra /

AB The title compds. I [U = Gly-Arg-, H; V = Pro, Gly; W = NH2, OH], useful as muscle relaxants and hypnotics (effectiveness comparable to that of a tubocurarine deriv.), were prepd. Thus, the protected cyclic oligopeptide amine II (Acm = AcNHCH2) was dissolved in aq. MeOH/dioxane contg. HCl and 0.1N iodine/MeOH added with vigorous agitation. After 20 min the reaction was stopped by addn. of ascorbic acid in citric acid buffer (pH 5.0) to give 11% I (U = H, W = NH2, V = Pro).

L5 ANSWER 1 OF 4 CA COPYRIGHT 2003 ACS
TI Pairwise interactions between neuronal .alpha.7 acetylcholine receptors and .alpha.-conotoxin PnIB PY 2000

L5 ANSWER 2 OF 4 CA COPYRIGHT 2003 ACS
TI Single amino acid substitutions in .alpha.-conotoxin PnIA shift selectivity for subtypes of the mammalian neuronal nicotinic acetylcholine receptor PY 1999

L5 ANSWER 3 OF 4 CA COPYRIGHT 2003 ACS
TI Uses of alpha-conotoxin peptides PY 1999 1999 2001 2002

L5 ANSWER 4 OF 4 CA COPYRIGHT 2003 ACS
TI Accelerated chemical synthesis of peptides and small proteins PY 1999

L5 ANSWER 2 OF 4 CA COPYRIGHT 2003 ACS
AN 132:132466 CA
TI Single amino acid substitutions in .alpha.-conotoxin PnIA shift selectivity for subtypes of the mammalian neuronal nicotinic acetylcholine receptor
AU Hogg, Ron C.; Miranda, Les P.; Craik, David J.; Lewis, Richard J.; Alewood, Paul F.; Adams, David J.
CS The Department of Physiology and Pharmacology, University of Queensland, Brisbane, 4072, Australia
SO Journal of Biological Chemistry (1999), 274(51), 36559-36564 CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology DT Journal LA English
AB The .alpha.-conotoxins, a class of nicotinic acetylcholine receptor (nAChR) antagonists, are emerging as important probes of the role played by different nAChR subtypes in cell function and communication. In this study, the native .alpha.-conotoxins PnIA and PnIB were found to cause concn.-dependent inhibition of the ACh-induced current in all rat parasympathetic neurons examd., with IC50 values of 14 and 33 nM, and a maximal redn. in current amplitude of 87% and 71%, resp. The modified .alpha.-conotoxin [N11S]PnIA reduced the ACh-induced current with an IC50 value of 375 nM and a maximally effective concn. caused 91% block. [A10L]PnIA was the most potent inhibitor, reducing the ACh-induced current in .apprx.80% of neurons, with an IC50 value of 1.4 nM and 46% maximal block of the total current. The residual current was not inhibited further by .alpha.-bungarotoxin, but was further reduced by the .alpha.-conotoxins PnIA or PnIB, and by mecamylamine. 1H NMR studies indicate that PnIA, PnIB, and the analogs, [A10L]PnIA and [N11S]PnIA, have identical backbone structures. The authors propose that positions 10 and 11 of PnIA and PnIB influence potency and det. selectivity among .alpha.7 and other nAChR subtypes, including .alpha.3.beta.2 and .alpha.3.beta.4. Four distinct components of the nicotinic ACh-induced current in mammalian parasympathetic neurons have been dissected with these conopeptides.
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